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PATENT
Docket No.: 18001/5062 (RPI-806)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Belfort et al.)
Serial No. : 10/812,792)
Cnfrm. No. : 4213)
Filed : March 30, 2004)
For : MICROFILTRATION AND/OR
ULTRAFILTRATION PROCESS FOR
RECOVERY OF TARGET MOLECULES
FROM POLYDISPERSE LIQUIDS)
Art Unit:
1645)

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§ 1.97-1.98**

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Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, applicants hereby bring to the attention of the United States Patent and Trademark Office, the enclosed references listed on the attached PTO-1449 form.

Pursuant to 37 C.F.R. § 1.97(b)(3), no fee is required. If additional fees are required, however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 14-1138.

Respectfully submitted,



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Registration No. 30,727

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				Application Number	10/812,792
				Filing Date	March 30, 2004
				First Named Inventor	Belfort et al.
				Art Unit	1645
				Examiner Name	To Be Assigned
Sheet	1	of	5	Attorney Docket Number	18001/5062 (RPI-806)

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	13	Al-Akoum et al., "Comparison of Three Different Systems Used for Flux Enhancement: Application to Crossflow Filtration of Yeast Suspensions," <i>Desalination</i> 147:31-36 (2002)			
	14	Bacchin et al., "A Unifying Model for Concentration Polarization, Gel-Layer Formation and Particle Deposition in Cross-Flow Membrane Filtration of Colloidal Suspensions," <i>Chem. Eng. Sci.</i> 57:77-91 (2002)			
	15	Baker et al., "Factors Affecting Flux in Crossflow Filtration," <i>Desalination</i> 53:81-93 (1985)			
	16	Baruah et al., "A Predictive Aggregate Transport Model for Microfiltration of Combined Macromolecular Solutions and Poly-Disperse Suspensions: Model Development," <i>Biotechnol. Progress</i> , 19:1524-32 (2003)			
	17	Baruah et al., "A Predictive Aggregate Transport Model for Microfiltration of Combined Macromolecular Solutions and Poly-Disperse Suspensions: Testing Model with Transgenic Goat Milk," <i>Biotechnol. Prog.</i> 19:1533-1540 (2003)			
	18	Baruah et al., "Optimized Recovery of Monoclonal Antibodies from Transgenic Goat Milk by Microfiltration," <i>Biotechnol. & Bioeng.</i> 87:274-285 (2004)			
	19	Belfort et al., "The Behavior of Suspensions and Macromolecular Solutions in Crossflow Microfiltration," <i>J. Membr. Sci.</i> 96:1-58 (1994)			
	20	Burns et al., "Contributions to Electrostatic Interactions on Protein Transport in Membrane Systems," <i>AIChE J.</i> 47:1101-14 (2001)			
	21	Burns et al., "Effect of Solution pH on Protein Transport through Ultrafiltration Membranes," <i>Biotech. & Bioengg.</i> 64:27-37 (1999)			
	22	Cheang et al., "Separation of α -Lactalbumin and β -Lactoglobulin Using Membrane Ultrafiltration," <i>Biotech. & Bioeng.</i> 83:201-209 (2003)			
	23	Ehsani et al., "Fractionation of Natural and Model Egg-White Protein Solutions with Modified and Unmodified Polysulfone UF Membranes," <i>J. Membr. Sci.</i> 123:105-119 (1997)			

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	24	Gekas et al., "Diffusive Flows in Ultrafiltration and Their Effect on Membrane Retention Properties," <i>J. Membr. Sci.</i> 80:73-83 (1993)			
	25	Gesan-Guiziou et al., "Critical Stability Conditions in Crossflow Microfiltration of Skimmed Milk: Transition to Irreversible Deposition," <i>J. Membr. Sci.</i> 158:211-222 (1999)			
	26	Gesan-Guiziou et al., "Process Steps for the Preparation of Purified Fractions of α -Lactalbumin and β -Lactoglobulin from Whey Protein Concentrates," <i>J. Dairy Res.</i> 66:225-236 (1999)			
	27	Ghosh et al., "Fractionation of Biological Macromolecules Using Carrier Phase Ultrafiltration," <i>Biotech. & Bioeng.</i> 74:1-11 (2001)			
	28	Ghosh et al., "Parameter Scanning Ultrafiltration," <i>Biotech. & Bioeng.</i> 81:673-682 (2003)			
	29	Goff et al., "Dairy Chemistry and Physics," In: Hui YH, editor, <i>Dairy Science and Technology Handbook</i> , Vol. 1, Principles and Properties. New York: VCH. p 1-81 (1993)			
	30	Le Berre et al., "Microfiltration (0.1 μ m) of Milk: Effect of Protein Size and Charge," <i>J. Dairy Res.</i> 65:443-455 (1998)			
	31	Lentsch et al., "Enhanced Separation of Albumin-poly (ethylene glycol) by Combination of Ultrafiltration and Electrophoresis," <i>J. Membr. Sci.</i> 80:221-232 (1993)			
	32	Lucas et al., "Extraction of α -Lactalbumin from Whey Protein Concentrate with Modified Inorganic Membranes," <i>J. Membr. Sci.</i> 148:1-12 (1998)			
	33	Meade et al., "Expression of Recombinant Proteins in the Milk of Transgenic Animals," In: Fernandez J., Hoeffler J., editors. <i>Gene Expression Systems: Using Nature for the Art of Expression</i> . Carlsbad: Academic Press. p 399-427 (1998)			
	34	Millesime et al., "Protein Retention with Modified and Unmodified Inorganic Ultrafiltration Membranes: Model of Ionic Strength Controlled Retention," <i>J. Membr. Sci.</i> 108:143-159 (1995)			
	35	Mochizuki et al., "Sieving Characteristics of Albumin Deposits Formed During Microfiltration," <i>J. of Coll. And Interface Sci.</i> 158:136-145 (1993)			

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	36	Morcol et al., "Model Process for Removal of Caseins from Milk of Transgenic Animals," <i>Biotechnol. Prog.</i> 17:577-582 (2001)	
	37	Muller et al., "Ultrafiltration Modes of Operation for the Separation of α -Lactalbumin from Acid Casein Whey," <i>J. Membr. Sci.</i> 153:9-21 (1999)	
	38	Ng et al., "Optimization of Solute Separation by Diafiltration," <i>Sep. Sci.</i> II(5):499-502 (1976)	
	39	Nystrom et al., "Fractionation of Model Proteins Using Their Physicochemical Properties," <i>Coll. And Surfaces</i> 138:185-205 (1998)	
	40	Pollock et al., "Transgenic Milk as a Method for the Production of Recombinant Antibodies," <i>J. Immunol. Methods</i> 231:147-57 (1998)	
	41	Rabiller-Baudry et al., "Application of a Convection-Diffusion-Electrophoretic Migration Model to Ultrafiltration of Lysozyme at Different pH Values and Ionic Strengths," <i>J. Membr. Sci.</i> 179:163-174 (2000)	
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	44	Smith et al., "Electrostatic effects on the Partitioning of Spherical Colloids Between Dilute Bulk Solution and Cylindrical Pores," <i>J. Coll. Interface Sci.</i> 91:571-590 (1983)	
	45	Tetra Pak Processing Systems, AB, S-221 86, <i>Dairy Processing Handbook</i> , Lund Sweden: Verlag. (1995) [Table of Contents and Index only]	
	46	van Reis et al., "Constant C_{wall} Ultrafiltration Process Control," <i>J. Membr. Sci.</i> 130:123-140 (1997)	
	47	van Reis et al., "High Performance Tangential Flow Filtration," <i>Biotech. & Bioeng.</i> 56:71-82 (1997)	

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	48	van Reis et al., "High-Performance Tangential Flow Filtration Using Charged Membranes," <i>J. Membr. Sci.</i> 159:133-142 (1999)			
	49	van Reis et al., "Optimization Diagram for Membrane Separations," <i>J. Membr. Sci.</i> 129:19-29 (1997)			
	50	Zeman et al., <i>Microfiltration and Ultrafiltration Principles and Applications</i> . Marcel Dekker, Inc., New York, (1996)			
	51	Zeman et al., "Polymer Solute Rejection by Ultrafiltration Membranes," <i>Synthetic Membranes vol. II. Hyperfiltration and Ultrafiltration Uses</i> (A. F. Turbak, ed.), ACS Symposium Series No. 54, American Chemical Society, Washington, D.C., p. 412 (1981)			
	52	Zydney et al., "Protein Transport Through Porous Membranes: Effect of Colloidal Interactions," <i>Coll. Surf. A</i> 138:133-143 (1998)			

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